

**RECEIVED
CENTRAL FAX CENTER**

001

DEC 03 2007

PATENT
Docket No. 180.00120101

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Zhao Yi WANG)	Group Art Unit: 1647
)	
Serial No.: 10/591,199)	Examiner: Shulamith H. Shafer
Confirmation No.: 4302)	
)	
Filed: August 30, 2006)	
)	
For: ESTROGEN RECEPTORS AND METHODS OF USE		
Patent Application Publication No.: 2007/0258895 A1		

FACSIMILE TRANSMISSION TO THE PTO

Mail Stop PGPUB	FAX NUMBER: (571) 273-8300
Commissioner for Patents	Total Pages (including cover page): 7
P.O. Box 1450	Time: 3:32 pm (Central Time)
Alexandria, VA 22313-1450	(Transmission must be complete by midnight eastern time.)

The following papers are being transmitted to the Patent and Trademark Office by facsimile transmission:

- Request for Correction and Republication of Patent Application Publication (2 pgs).
- Copy of the face page of the patent application publication with the requested correction marked (1 pg).
- Copy of the previously filed Application Data Sheet (2 pgs).
- Page one of the application as filed (1 pg).

- Small Entity Status is entitled to be asserted in the above-identified application.

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 13-4895.

Muetting, Raasch & Gebhardt, P.A.
Customer Number: 26813

Date: December 3, 2007
By: David L. Provence
David L. Provence
Reg. No. 43,022
Direct Dial (612) 305-1005

Date

CERTIFICATE UNDER 37 C.F.R. §1.8: The undersigned hereby certifies that this Facsimile Cover Sheet and the paper(s), as described hereinabove, are being transmitted by facsimile in accordance with 37 CFR §1.6(d) to the Patent and Trademark Office addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 3rd day of December, 2007, at 3:32 pm (Central Time).

Dec. 3, 2007
Date

Signature: Deb Schurmann
Name: Deb Schurmann

If you do not receive all pages, please contact us at (612)305-1220 (ph) or (612)305-1228 (fax).

1 of 7

DEC 03 2007PATENT
Docket No. 180.00120101**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Zhao Yi WANG) Group Art Unit: 1647
)
Serial No.: 10/591,199) Examiner: Shulamith H. Shafer
Confirmation No.: 4302)
)
Filed: August 30, 2006)
)
For: ESTROGEN RECEPTORS AND METHODS OF USE
Patent Application Publication No.: 2007/0258895 A1

**REQUEST FOR CORRECTION AND REPUBLICATION
OF PATENT APPLICATION PUBLICATION**

Mail Stop PGPUB
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This paper is a request for correction and republication of the above-identified Patent Application Publication, which was published on November 8, 2007.

Applicant's Representatives identified the following errors made by the U.S. Patent and Trademark Office: on the face page of the publication, in the Related U.S. Application Data section, Provisional Application No. 60/522,067, filed on Aug. 10, 2004 is incorrect. The correct Provisional Application No. is 60/552,067, filed on March 10, 2004.

Enclosed is a copy of the face page of the patent application publication with the requested correction marked. Also enclosed is a copy of the previously filed Application Data Sheet and page one of the application as filed, both showing the correct provisional application number.

**RECEIVED
CENTRAL FAX CENTER**

003

DEC 03 2007

Request for Correction and Republication of Patent Application Publication

Page 2 of 2

Applicant(s): Zhao Yi WANG

Serial No.: 10/591,199

Confirmation No.: 4302

Filed: August 30, 2006

For: ESTROGEN RECEPTORS AND METHODS OF USE

Pursuant to 37 C.F.R. §1.221(b), we request that the error indicated above be corrected, and that the above-identified Patent Application Publication be re-published without additional publication or processing fees.

CERTIFICATE UNDER 37 C.F.R. 1.8:

The undersigned hereby certifies that this paper is being transmitted by facsimile in accordance with 37 CFR §1.6(d) to the Patent and Trademark Office, addressed to: Mail Stop PGPub, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 3rd day of December, 2007, at 3:32 pm (Central Time).

By: Deb Schurmann
Name: Deb Schurmann

Date

December 3, 2007

Respectfully submitted
By
Mueting, Raasch & Gebhardt, P.A.
P.O. Box 581415
Minneapolis, MN 55458-1415
Phone: (612)305-1220
Facsimile: (612)305-1228
Customer Number 26813

By: David L Provence
David L. Provence
Reg. No. 43,022
Direct Dial (612)305-1005



US 2007025895A1

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2007/0258895 A1
(43) Pub. Date: Nov. 8, 2007

(54) ESTROGEN RECEPTORS AND METHODS OF USE

(76) Inventor: Zhao Yi Wang, Bellevue, NE (US)

Correspondence Address:
 MUETING, RAASCH & GEBHARDT, P.A.
 P.O. BOX 581415
 MINNEAPOLIS, MN 55458 (US)

(21) Appl. No.: 10/591,199

(22) PCT Filed: Mar. 10, 2005

(86) PCT No.: PCT/US05/07857

§ 371(c)(1),
 (2), (4) Date: Jun. 13, 2007

Related U.S. Application Data

(60) Provisional application No. 60/552,067, filed on Aug. 10, 2004. Provisional application No. 60/643,469, filed on Jan. 13, 2005.

March 10, 2004

60/552,067

Publication Classification

(51) Int. Cl.		
<i>A61K</i>	<i>38/70</i>	(2006.01)
<i>A61K</i>	<i>49/00</i>	(2006.01)
<i>C07H</i>	<i>21/04</i>	(2006.01)
<i>C07K</i>	<i>14/00</i>	(2006.01)
<i>C07K</i>	<i>16/00</i>	(2006.01)
<i>C07K</i>	<i>7/08</i>	(2006.01)
<i>C12N</i>	<i>1/19</i>	(2006.01)
<i>C12N</i>	<i>1/21</i>	(2006.01)
<i>C12N</i>	<i>5/02</i>	(2006.01)
<i>C12N</i>	<i>5/16</i>	(2006.01)
<i>C12P</i>	<i>21/00</i>	(2006.01)
<i>C12Q</i>	<i>1/02</i>	(2006.01)
<i>C12Q</i>	<i>1/68</i>	(2006.01)
<i>G01N</i>	<i>33/53</i>	(2006.01)

(52) U.S. Cl. 424/9.1; 435/252.3; 435/254.2;
 435/29; 435/325; 435/348;
 435/375; 435/6; 435/69.1; 435/7.1;
 435/7.93; 514/14; 530/327;
 530/350; 530/387.9; 536/23.5

(57) ABSTRACT

The present invention provides isolated polypeptides having an amino acid sequence having at least 70% identity to SEQ ID NO:20, wherein the polypeptide has ER- α 36 activity. The invention further provides methods for identifying agents that bind to such polypeptides, methods for detecting such polypeptides, and methods for altering the activity of such polypeptides. Also provided are antibodies that specifically bind to an amino acid sequence depicted at SEQ ID NO:1, or an immunogenic fragment thereof, and methods for making and using such antibodies.

APPLICATION DATA SHEET

COPY

APPLICATION INFORMATION

Application Type:: REGULAR
Subject Matter:: UTILITY
CD-ROM or CD-R?:: NONE
Sequence Submission?:: PAPER
Computer Readable Form (CRF)?:: YES
Number of Copies of CRF:: 1
Title:: ESTROGEN RECEPTORS AND
METHODS OF USE
Attorney Docket Number:: 180.00120101
Total Drawing Sheets:: 26
Licensed US Govt. Agency:: Department of Health and Human
Services
Contract or Grant Numbers:: CA84328

INVENTOR INFORMATION

Applicant Authority Type:: INVENTOR
Primary Citizenship Country:: US
Status:: FULL CAPACITY
Given Name:: Zhao
Middle Name:: Yi
Family Name:: WANG
City of Residence:: Bellevue
State or Province of Residence:: NE
Country of Residence:: US
Street of Mailing Address:: 10005 South 11th Street
City of Mailing Address:: Bellevue
State or Province of Mailing Address:: NE
Country of Mailing Address:: US
Postal or Zip Code of Mailing Address:: 68123

CORRESPONDENCE INFORMATION

Correspondence Customer Number:: 26813

REPRESENTATIVE INFORMATION

Representative Customer Number:: 26813

DOMESTIC PRIORITY INFORMATION

Application::	Continuity Type::	Parent Application::	Parent Filing Date::
This Application	National Stage of	PCT/US05/007857	03/10/05
PCT/US05/007857	119(e) of	60/552,067	03/10/04
PCT/US05/007857	119(e) of	60/643,469	01/13/05

FOREIGN PRIORITY INFORMATION

COPY

ASSIGNMENT INFORMATION

Assignee Name:: Creighton University
Street of Mailing Address:: 2500 California Plaza
City of Mailing Address:: Omaha
State or Province of Mailing Address:: NE
Country of Mailing Address:: US
Postal or Zip Code of Mailing Address:: 68178

PATENT
Docket No. 180.00120201

5

ESTROGEN RECEPTORS AND METHODS OF USE
CONTINUING APPLICATION DATA

COPY

This application claims the benefit of U.S. Provisional Application Serial No. 60/552,067, filed 10 March 2004, and 60/643,469, filed 13 January 10 2005, each of which is incorporated by reference herein.

Government Funding

The invention described herein was developed with support from the 15 Department of Health and Human Services under Grant Number CA84328. The U.S. Government has certain rights in the invention.

BACKGROUND OF THE INVENTION

20 Estrogen is a generic term for steroid compounds that are formed in the ovary, the testis, and possibly the adrenal cortex. Examples of estrogens and compounds having estrogen activity include diethylstilbestrol, fosfestrol, hexestrol, polyestradiol phosphate, broparoestrol, chlorotrianisene, dienestrol, diethylstilbestrol, methestrol, colpormon, equilenin, equilin, estradiol, estriol, 25 estrone, ethinyl estradiol, mestranol, mexestrol, quinestradiol and quinestrol. Estrogens regulate diverse physiological processes in reproductive tissues and in mammary, cardiovascular, bone, liver, and brain tissues. Estrogens are also used in oral contraceptives. Other uses for estrogens include the relief of the discomforts of menopause, inhibition of lactation, and treatment of 30 osteoporosis, threatened abortion, and various functional ovarian disorders. Anti-estrogens are used to treat metastatic breast carcinoma and advanced prostate cancer.